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ABSTRACT

The present paper reports on an experiment designed to test the semantic analysis of Spanish mood vs. the traditional analysis in terms of government, by testing preferences for the Present Indicative or the Present Subjunctive following expressions of varying certainty. Two separate tests were conducted, in which subjects were given the option of accepting the inflection of a given construction in either mood or in both. The results of the two tests were similar in the overall percentage of acceptance given to each option. This would be compatible with either the traditional syntactic analysis or the semantic analysis of Spanish mood. But other findings are consistent only with the semantic analysis. In particular, (1) preference for the Present Indicative was found to correlate directly, and preference for the Present Subjunctive to correlate inversely, with the degree of certainty conveyed by the introductory expression; and (2) it was found that the greatest number of options was accepted at the point where preference for the Indicative and preference for the Subjunctive cross. The present report is intended to contribute to the growing body of work which shows that meaning can be investigated empirically, by formulating and testing hypotheses as to the actual uses particular semantic analyses would predict. (Author/CLK)

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EXPERIMENTAL VERIFICATION OF SEMANTIC HYPOTHESES APPLIED TO MOOD IN SPANISH

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In Spanish, as in other languages, the particular mood which occurs in a given complement clause--Indicative or Subjunctive--traditionally has been analyzed as meaningless in itself, and as "governed" by the particular complementizer in the main clause (Bello 1891: # 448 f; Lakoff 1968). This view has been challenged recently by Hooper (1975) and by Terrell and Hooper (1975), who show that the actual co-occurrence of particular complementizers or types of complementizers with a particular mood in the complement can be explained by analyzing the moods themselves as meaningful. Specifically, they propose that the observed co-occurrences follow directly from the assumption that the Indicative conveys 'assertion,' and the Subjunctive 'non-assertion,' of the event expressed by the verb. This semantic analysis of Spanish mood is given in Figure 1. Further support for this analysis is given in Klein (1975). There I argue that it also explains the different readings obtained from

Figure 1

Semantic analysis of mood in Spanish

Indicative = 'assertion'
Subjunctive = 'non-assertion'
} of the occurrence expressed by the verb

complementizers that can occur with either mood, depending on the particular mood with which they actually occur. That is, I argue that the different interpretations of the complementizer in cases of Indicative/Subjunctive contrast are due to the same semantic principle that is responsible for the more syntactically tractable cases of complementary distribution between complementizer and complement mood. In addition, I argue that the semantic analysis of Spanish mood provides the only principled explanation for the interpretation of Subjunctives occurring independently.

Today I will report on an experiment designed to test the relative merits of the semantic analysis of Spanish mood and the traditional analysis in terms of government, by testing their ability to predict the co-occurrence of mood with expressions of varying certainty. By this I mean the equivalents of such expressions as 'maybe,' 'most likely,' 'it is clear that,' 'it can't be that,' and the like. Let us consider the pattern of

co-occurrence with expressions of this kind each one of the analyses of Spanish mood would lead us to expect.

Suppose first that the occurrence of a particular mood in Spanish is syntactically "governed," as has traditionally been assumed. If this were the case, co-occurrence of one mood or the other with expressions of relative certainty such as those illustrated above would be expected to exhibit the following characteristics:

(1) First, to the extent that we are dealing with dialects that are uniform with respect to the feature in question, the co-occurrence of a particular expression with a particular mood should be an all-or-nothing matter. That is, a particular expression either governs a given mood or it doesn't govern it; if it does its co-occurrence with that mood should be 100%; if it doesn't it should be 0;

(2) Second and more important, and irrespective of possible dialectical differences, if the occurrence of mood in Spanish is a matter of syntactic government the actually occurring moods should exhibit a random relationship to the relative degree of certainty expressed. In other words, there should be no particular correlation between the greater or lesser degree of certainty expressed and the occurrence of one mood or the other.

This is of course exactly the opposite of what the semantic analysis predicts. If it is correct, we would expect the use of the 'assertive' indicative to be higher the higher the certainty expressed, while use of the 'non-assertive' Subjunctive should increase as the certainty expressed diminishes. In addition, since the predictions of the semantic analysis are based on the expectation of an overall semantic coherency between the various elements in the utterance, rather than on that of an automatic dependence of any one particular element on any other, the semantic analysis does not lead us to expect that co-occurrence relations should be of an all-or-nothing nature. Instead, it predicts a relative preference for the use of a given element--one or the other mood, in this case--as a function of the semantic character of the other elements present.

Two tests were conducted, the first on nineteen (19) subjects, and the second on fourteen (14) other subjects, from various parts of the Spanish-speaking world. In each case the subjects were given a questionnaire in which twenty-three expressions were listed in random order. The expressions varied as to the relative certainty they convey, ranging from the equivalent of 'it has been shown that' and the like to that of 'it can't be that' and the like. Each expression was followed by alternative forms

of the ending él tiene la culpa 'he is guilty/at fault,' with the order in which the alternatives were given reversed in the two tests. In Test 1 the ending was given in the Present Subjunctive, in the Future Indicative, and in the Present Indicative. In Test 2 this order was reversed, to control for possible effects of order of presentation. The reason for including an alternative in the Future will be discussed presently. The subjects were instructed to check any ending or endings they found acceptable or "normal" in each case. Note that they were not asked to necessarily check one ending, but were given the option of checking as many or as few as seemed acceptable.

The relative order in which the options were presented apparently had no influence on the subjects' preferences. This is seen in the fact that the overall percentage of acceptance given each alternative form is almost the same in the two tests, as Figure 2 shows. (In

Figure 2

Percentage of the total number of alternatives accepted in each form, in each of the two tests given

	Present Indicative	Present Subjunctive	Future Indicative
Test 1	46%	33%	22%
Test 2	43%	32%	25%

Test 1 the Present Indicative accounted for 46% of the total choices, and in Test 2 for 43%; in Test 1 the Future accounted for 22% of the total choices, and in Test 2 for 25%; in Test 1 the Present Subjunctive accounted for 33% of the total choices, and in Test 2 for 32%.) Accordingly, the results for both tests are combined in Figure 3. Here the various expressions of relative certainty used have been ordered on the abscissa according to the percentage of the total number of alternatives accepted with each one was in the Present Indicative--from the highest percentage of Present Indicative acceptance on the left to the lowest on the right. This same order will be maintained in all subsequent illustrations. In Figure 4 the expressions used are listed, in this order, together with their approximate equivalents in English.

The finding that the overall percentage of acceptance given each of the alternatives was so similar in both tests would be consistent with either the semantic analysis of Spanish mood or the traditional analysis in terms of government. Other results, however, support only the semantic analysis. Let us consider first the results for the Present Indicative and the Present Subjunctive shown in Figure 3. Here we find no observable tendency toward the "all-or-nothing" choices which government would account for, but rather a relative degree of preference for each

Figure 3

Percentage of the total number of alternatives accepted in the Present Indicative and in the Present Subjunctive, with each expression of relative certainty

Estas declaraciones son
Estas verdad que
Es cierto que
Al parecer
Es evidente que
No cabe duda que
Sin duda
Segun que
Me imagino que
Creo que
Seguramente
Sospecho que
Probablemente
Probablemente
Quizás
lo mismo probable es que.
No creo que.
Dudo que
Es imposible que
Es posible que
No es probable que
No es posible que
Es poco probable que.

Figure 4

Expressions of relative certainty used, with their approximate English equivalents, in the order in which they elicited higher to lower acceptance of the Present Indicative overall

Está demostrado que	'It has been shown that...'
Está visto que	'It is clear that ...'
Te aseguro que	'I assure you that ...'
Al parecer	'Apparently'
Es evidente que	'It is evident that...'
No cabe duda que	'There can be no doubt that ...'
Sin duda	'Without doubt'
Seguro que	'Sure/Of course'
Me imagino que	'I imagine that ...'
Creo que	'I think that ...'
Seguramente	'Most likely'
Sospecho que	'I suspect that ...'
Posiblemente	'Possibly'
Probablemente	'Probably'
Quizá	'Maybe'
Lo más probable es que	'Most probably'
No creo que	'I don't think that...'
Dudo que	'I doubt that...'
Es imposible que	'It can't be that ...'
Es posible que	'It could be that ...'
No es probable que	'It's not likely that ...'
No es posible que	'It's not possible that ...'
Es poco probable que	'It's unlikely that ...'

alternative. More importantly, the relationship between the percentage of acceptance given each mood, and the relative degree of certainty conveyed by the introductory expressions, does not appear to be random. On the contary, ordering the expressions by the percentage of acceptance for the present Indicative they elicited results in a list which appears to range o the whole from greater to lesser degree of certainty. This can perhaps be seen more readily in Figure 5, where the results are given for only nine symmetrically equidistant expressions of the total twenty-three--these are the nine that have been underlined in Figure 4.

As the percentage of acceptance of the Present Indicative decreases, the percentage of acceptance of the Present Subjunctive tends to increase. Thus acceptance of the Indicative tends to correlate directly, and acceptance of the Subjunctive to correlate inversely, with the degree of certainty expressed. This is just what the semantic analysis of Spanish mood would predict.

Another result which is consistent with the semantic analysis, but not with the analysis in terms of government, has to do with the total number of alternatives accepted in each case. If the Indicative signals 'assertion,' and the Subjunctive, 'non-assertion,' then preference for one mood at the expense of the other should be most marked where the relative degree of certainty is

Está demostrado que

Es cierto que

No cabe duda que

Me imagino que

Comprendo que

Creo que

Dudo que

No es probable que.

Es poco probable que.

Figure 5

Percentage of the total number of alternatives accepted in the Present Indicative and in the Present Subjunctive, with the expressions underlined in Figure 4

also most marked--that is, both at the high and at the low ends of the scale of relative certainty. In contrast, where certainty is neither high nor low (as it is with such expressions as quizá 'maybe' or posiblemente 'possibly') the choice should be less obvious. One possible result of this would be a relatively greater acceptance of both (or all) the alternatives at the mid-point. And this is in fact what we find. In Figure 6 the total number of alternatives accepted has been plotted with a dotted line. We find that its values are lowest at the extremes of preference for the Indicative, on the left, and for the Subjunctive, on the right, and that they rise gradually in between. The peak is reached in response to posiblemente 'possibly' and probablemente 'probably'--that is, just before the cross-over from preference for the Indicative to preference for the Subjunctive, which occurs in response to quizá 'maybe.'

Although the two tests are similar enough in overall acceptance of each of the alternatives given to justify combining the results, the extent and the details of the similarities between them are of interest in themselves, in that they tend to confirm the validity of the findings. Accordingly, the results that were combined in Figure 3 are given separately for the two tests in Figures 7 (a) and (b), and the results that were combined in Figure 5 are given separately for the two tests in Figures 8 (a) and

Fig. 6

Total number of alternatives accepted with each expression

Es fácil demostrarlo que
Es fácil vista que
Es aconsejable que
Al parecer
Es evidente que
No cabe duda que
Sin duda
Seguro que
Me imagino que
Creo que
Seguramente
Sorprende que
Es imaginable
Probablemente
Quizás
Es muy probable que
No creo.
Dudo que
Es imposible que
Es posible que
No es probable que
Es poco probable que

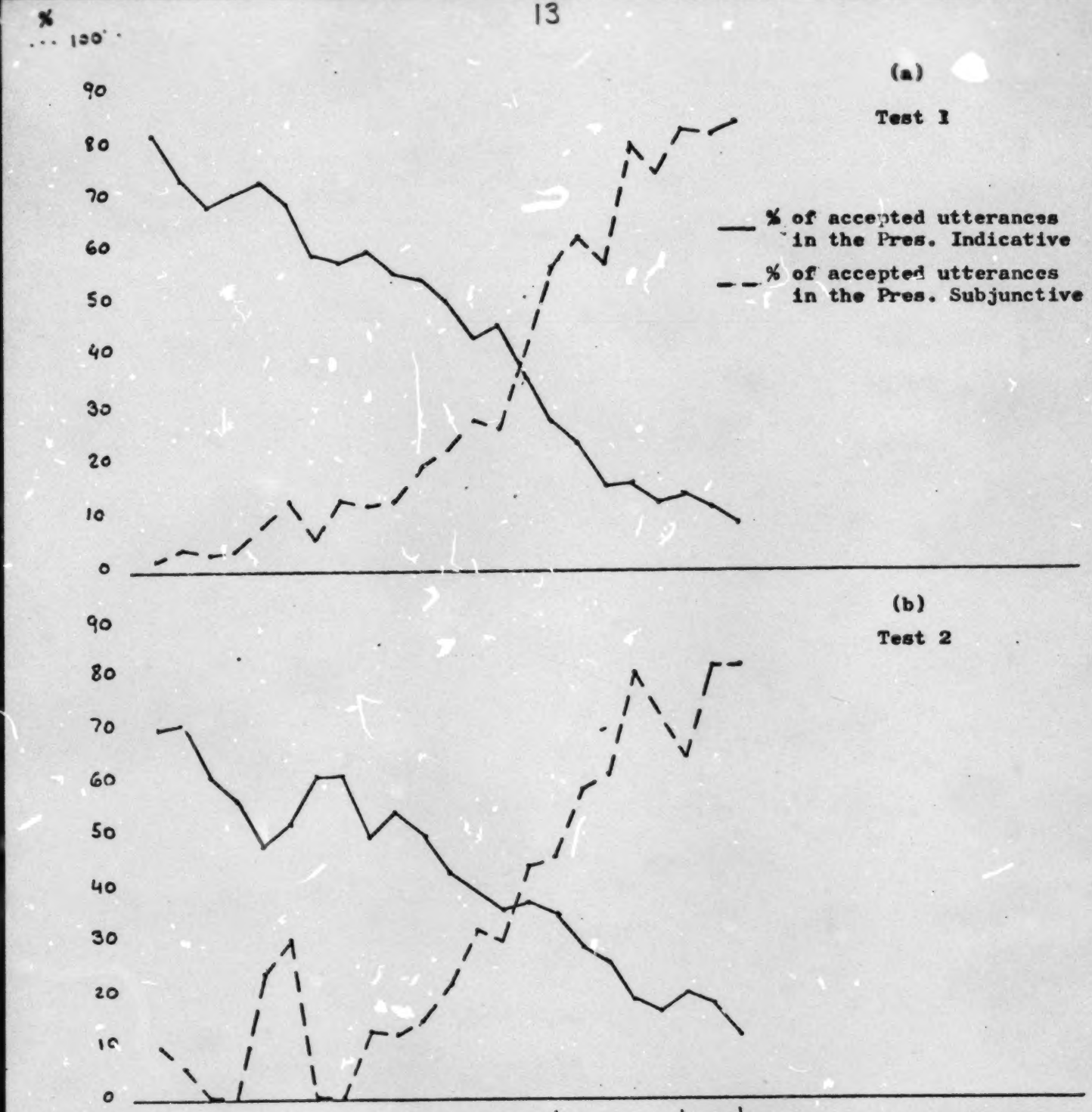

Figure 7

Percentage of the total number of alternatives accepted in the Present Indicative and in the Present Subjunctive with each expression, in each of the two tests

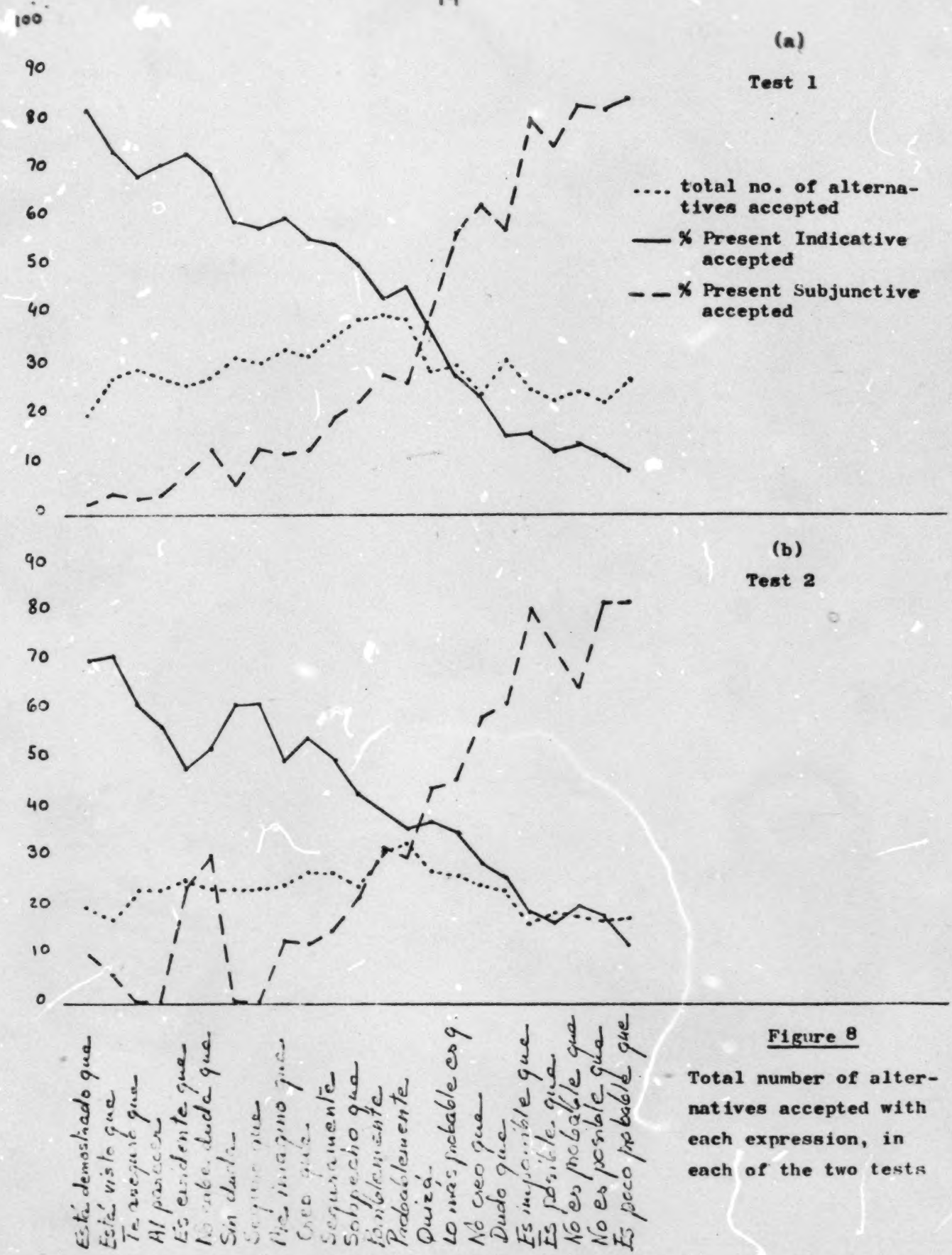

Figure 8

Total number of alternatives accepted with each expression, in each of the two tests

(b). I will not dwell on comparing them, except to note that in both tests the cross-over between preference for the Indicative and preference for the Subjunctive occurs at the same point--that of quizá 'maybe.' Also, Figures 8 (a) and (b) show that in both tests the total number of alternatives accepted is highest just before this cross-over point, and then declines at either extreme.

Let us now go on to consider the results obtained for the Future tense, in terms of the reasoning that led in the first place to its inclusion as one of the options. The assumption was that the meaning of the so-called Future Indicative might also have to do with 'assertion,' and that, on this semantic parameter, it might lie somewhere in between the 'assertive' Present Indicative and the 'non-assertive' Present Subjunctive, as shown in Figure 9. Compelling theoretical arguments can be made in favor of this assumption. First of all there are the actual interpretations of the Future tense. The Future may be understood (1) as placing the occurrence of the event at a time posterior to the time of speaking (as in iré manana 'I'll go tomorrow'), or (2) as indicating that the occurrence of the event is relatively probable at the time of speaking itself (as in tendrá unos treinta anos 'he must be about thirty years old'). Thus far the Future has generally been analyzed as essentially expressing "posteriority," with its

Figure 9

Hypothesis as to the meaning of the Spanish Future Indicative, relative to the Present Indicative and the Present Subjunctive

use to convey "probability" being taken as some kind of metaphoric extension of the basic reference to the event as not-yet-realized (Bello 1891: #689; Pottier 1966: #220).

This analysis, however, presents at least the following problems: First, though perhaps least important theoretically, is the fact that it is the expression of probability in the present that appears to be the most frequent use of the Future tense. Indeed, this interpretation of the Future seems to be gaining more and more in relative frequency over the expression of posteriority in time, as the latter tends to be expressed increasingly by periphrasis with ir a 'going to.' But a more serious objection to the traditional analysis is that the nature of the "metaphoric process" to which it must appeal, to account for the interpretation of the Future as expressing probability in the present, has never been clearly spelled out and is by no means evident. That is, it has never been explained why a hearer, allegedly informed by the meaning of the future that the event is to occur after the moment of speaking, should go on to conclude from this that, instead, the event is being placed at the moment of speaking, as a relatively probable occurrence. Note that this incongruity persists even when there are indications in the context that are incompatible with future time--such as ahora 'now.' To be sure, expressions of present time such

as ahora should be incompatible with an inference of posteriority. But by the same token they should also be incompatible with the Future tense itself, if its meaning is indeed one of posteriority. So the question is, then, why a hearer faced with such an incongruity as to time reference should conclude (a) that what he is being told is that the event is placed at the time of speaking, rather than after it (or in other words that the "correct" time reference is in this instance not that given by the verb, but by some other element in the utterance), and (b) that the occurrence of the event is relatively probable. To my knowledge none of the authors who accept the analysis of "posteriority" has gone on to explain how this inference might come about.[1] Yet, if we are to formulate hypotheses as to the meaning of linguistic elements, it would seem that the actual uses/interpretations of these elements in speech must be shown to follow from the meanings posited for them, in some plausible way.

In the case of the Spanish Future, it seems that a more plausible relationship between hypothesized meaning and actual use would be the contrary of what is generally claimed. That is, suppose that the meaning expressed by the Future tense is actually not posteriority, but rather has to do with relative probability. It then seems quite natural that it might be interpreted, first, as conveying probability itself. And secondly, the notion "relatively probable" might also quite naturally be understood to

suggest the expectation of yet-to-be realized or future events, since such events are necessarily in the realm of the hypothetical or only relatively probable, as compared to present or past events.

Now, the meaning we actually hypothesized for the Future and set out to test here was not "relative probability" itself. Rather, assuming that the meanings of the Indicative and the Subjunctive differ as 'assertive' to 'non-assertive,' it was supposed that the meaning of the Future might lie between that of the Present Indicative and that of Present Subjunctive on the parameter of 'assertion.' The readings of "assumption of relative probability," or "expectation," would then follow naturally from the intermediate degree of assertiveness, depending on the context in which it occurs.

The findings for the Future tense are shown in Figure 10. On the one hand, these distributions could not be accounted for by the traditional view of the Future as expressing posteriority in time. Rather, they are consistent with the hypothesis that the Future conveys a degree of assertiveness somewhere between that of the Present Indicative and that of the Present Subjunctive, insofar as acceptance of the Future rises as acceptance of the Present Indicative diminishes, and inasmuch as it reaches its peak before that of acceptance of the Present Subjunctive. However, the results in Figure 10 do not

Figure 10

Percentage of the total number of alternatives accepted in the Present Indicative, in the Present Subjunctive, and in the Future Indicative, with each expression

Está demostrado que
Está visto que
Es necesario que
Al parecer
Es evidente que
No cabe duda que
Sin duda
Segun que
Me imagino que
Creo que
Seguramente
Sospecho que
Probablemente
Indudablemente
Quizá
Lo mas probable es q.
No creo que
Dudo que
Es imposible que
Es posible que
No es probable q.
No es posible que
Es poco probable q.

suggest for the Future a degree of assertiveness that lies between that of the Indicative and that of the Subjunctive, in the sense of representing a mid-point (or mid-area) between them. For such an assumption would predict for the Future an area of preference centered around the cross-over point between preference for the Indicative and preference for the Subjunctive. Instead, we find that the area of highest acceptance of the Future lies clearly within the area of preference for the Indicative. Moreover, even within this area the percentage of acceptance of the Present Indicative is higher than that of the Future. Once again these tendencies are confirmed in the two tests considered separately, as Figures 11 (a) and (b) show.

Now there may be any number of reasons for these findings. But the overall agreement of the two tests in this regard suggests that, perhaps, the hypothesis that the meaning of the Future lies between that of the Present Indicative and that of the Present Subjunctive on a single parameter of 'assertiveness' may be too simple-minded, and that a more refined analysis may be needed to accurately capture the semantic difference between these items. In particular, our results suggest that the relationship between the Present Indicative and the Future may not be of a "scalar" character at all--that is, one which simply involves differences of degree on a single dimension. Instead, the relationship may be one of "inclusion"--that is, the meaning of the Future may fall within the area of the

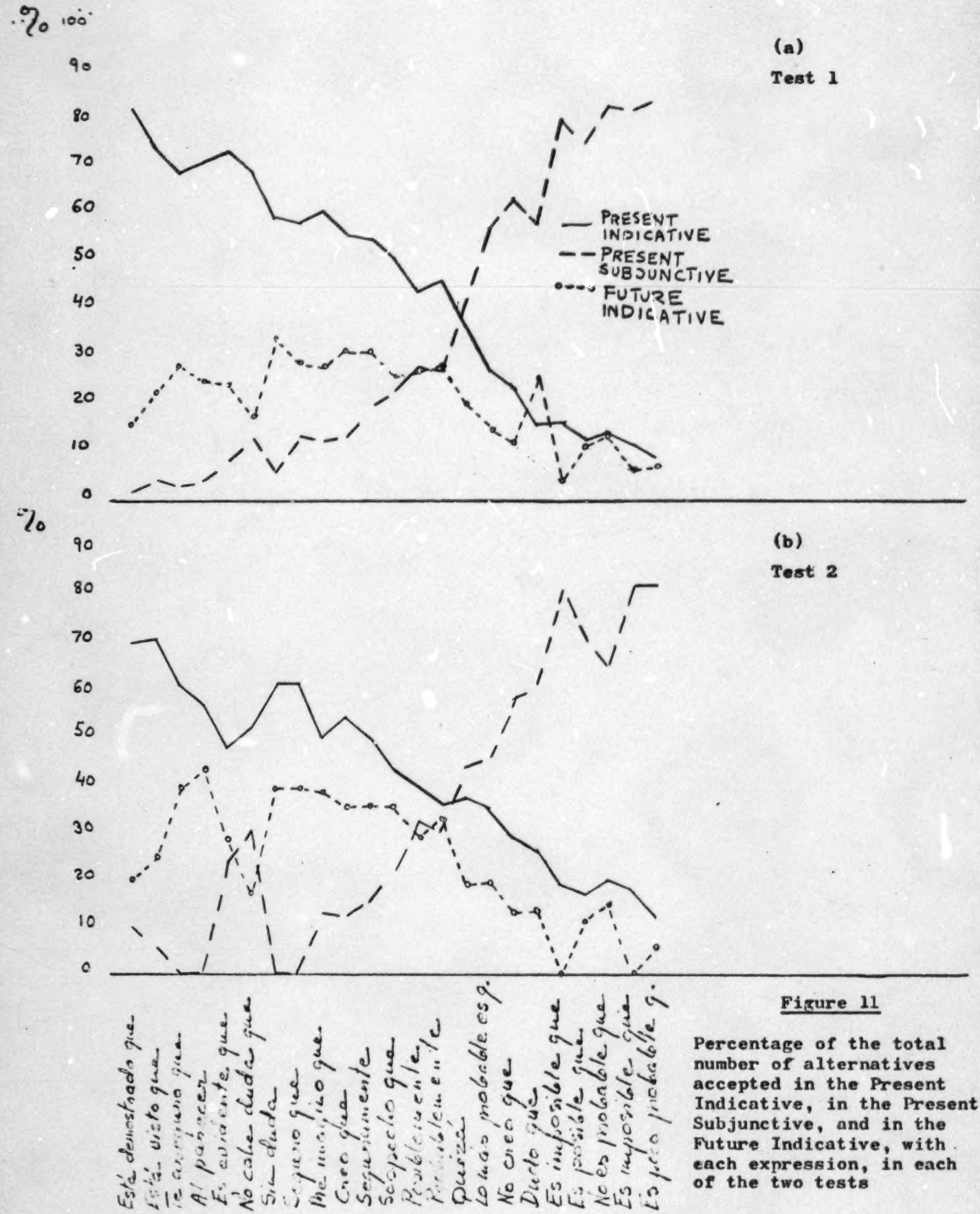

Figure 11

Percentage of the total number of alternatives accepted in the Present Indicative, in the Present Subjunctive, and in the Future Indicative, with each expression, in each of the two tests

meaning of the Present Indicative, but it might somehow be more specialized or specific in some respect. I am attempting to zero in on the exact nature of the semantic difference involved, and will present my findings in a later paper.

Another interesting question which must be left for later is that of possible dialectal differences. Especially tantalizing is the possibility that such differences might manifest themselves in the area which is least determined semantically--that is, in the area around the cross-over between Indicative and Subjunctive. The present study did not include enough subjects from any one geographical area to permit any conclusions in this regard, since it was intended primarily as a pilot study or preliminary test of the relative predictive utility of the semantic analysis of Spanish mood as compared to the theory of syntactic government, in one particular area of usage. For the same reason other variables were not distinguished which it may be fruitful to separate in subsequent work. I have in mind especially various differences between the introductory expressions themselves, which might well turn out to be relevant in affecting the choice of alternatives--for example, whether or not the expression contains pronominal reference to the speaker or to the hearer, whether or not it contains the negative no, etc.

To conclude, we have presented some initial evidence which, first, does not support the traditional notion that mood in Spanish is "governed," but rather supports the hypothesis that the Indicative and the Subjunctive differ in meaning, with the Indicative conveying the 'assertion,' and the Subjunctive the 'non-assertion,' of the event expressed by the verb. Second, our findings are not consistent with the idea that the meaning of the Future Indicative has to do with "posteriority." Yet they also suggest that the Future is not simply intermediate as to assertiveness, but rather that it may differ in meaning from the Present Indicative and the Present Subjunctive in some more complex fashion, yet to be discovered and defined.

This very simple study is intended to add to the growing body of empirical research into the nature of linguistic meaning and its actual use in communication.[2] It is therefore hoped that it will contribute to the realization that linguistic meaning is amenable to objective investigation, through the formulation and testing of hypotheses as to the actual usage which particular semantic analyses predict.

NOTES

[1]A possible exception would be Bull (1963:61), who maintains that the incongruity in time reference itself establishes a different signal for a different meaning, i.e. probability. But he does not attempt to relate semantically the two "different meanings" associated with the Future tense.

[2]For example see Garcia (1975), Garcia and Otheguy (1974), Kirsner (1975), and Zubin (1974a and 1974b).

REFERENCES

Bello, Andrés. 1891. Gramatica de la lengua castellana destinada al uso de los americanos. Ed. by Rufino J. Cuervo. Paris.

Bull, William E. 1963. Time, Tense, and the Verb: A Study in Theoretical and Applied Linguistics, with Particular Attention to Spanish. University of California Publications in Linguistics. Vol. 19. University of California Press.

García, Erica. 1975. The Role of Theory in Linguistic Analysis: The Spanish Pronoun System. Amsterdam: North Holland.

García, Erica and Ricardo Otheguy. 1974. "Dialectical Variation in leismo: a Semantic Approach." Paper read at NWAVE III. Washington, D.C.: Georgetown University.

Hooper, Joan B. 1975. "On Assertive Predicates." 91-124. In Syntax and Semantics, Vol. 4. New York: Academic Press.

Kirsner, Robert. 1969. "The Role of zullen in the Grammar of Modern Standard Dutch." In Lingua 24, 101-154.

_____. 1975. "On the Subjectless 'Pseudo-Passive' in Standard Dutch and the Problem of Backgrounded Agents." Paper presented at the Conference on Subjects and Topics, University of California at Santa Barbara.

Klein, Flora. 1975. "Pragmatic Constraints on Distribution: The Spanish Subjunctive." In Papers from the Eleventh Regional Meeting of the Chicago Linguistic Society. 353-365. Chicago: Chicago Linguistic Society.

Lakoff, Robin. 1968. Abstract Syntax and Latin Complementation. Cambridge, Massachusetts: M.I.T. Press.

Pottier, Bernard. 1966. Introduction a l'etude de la morphosyntaxe espagnole. 4th Ed. Paris: Ediciones Hispanoamericanas.

Terrell, Tracy and Joan B. Hooper. 1974. "A Semantically Based Analysis of Mood in Spanish." In Hispania 57 (September). 484-494.

Zubin, David. 1974a. "Experimental Validation of a Linguistic Analysis." Paper read at the Summer Meeting of the Linguistic Society of America.

_____. 1974b. "The Semantic Basis of Case Alternation in German." Paper read at NWAVE III. Washington, D.C.: Georgetown University.